MINI 1300 Antenna analyzer

Specification:

Frequency Range: 0.1-1300MHz HF/VHF/UHF continuous coverage

In/Out Impedance: 50 ohm

Measurement Parameters: SWR,R,+Jx,-Jx,/Z/,Return loss

Measurement Mode: Single point measurement, Scanning(Frequency Sweep),and TDR Mode

SWR Measurement Range: 1.0-1999(Single Point Mode),1.0-20.0(Scan Mode)

Display Modes: Numerical display, curve display, simith chart

Connector Type: UHFN - type connector

VNA: SMA

SMA OPEN-SHORT-LOAD Calibration Kit x 1

LCD size: 480x2724 .3"TFTL CD display

Touch Screen Type: CapacitiveAll capacitive touch screen on the display no buttons are needed

Power Source: USB or Internal Li-ion. Built-in Li-ion charging circuit ry and DC-DC booster
                Maximum charging current: 5V/1.5A

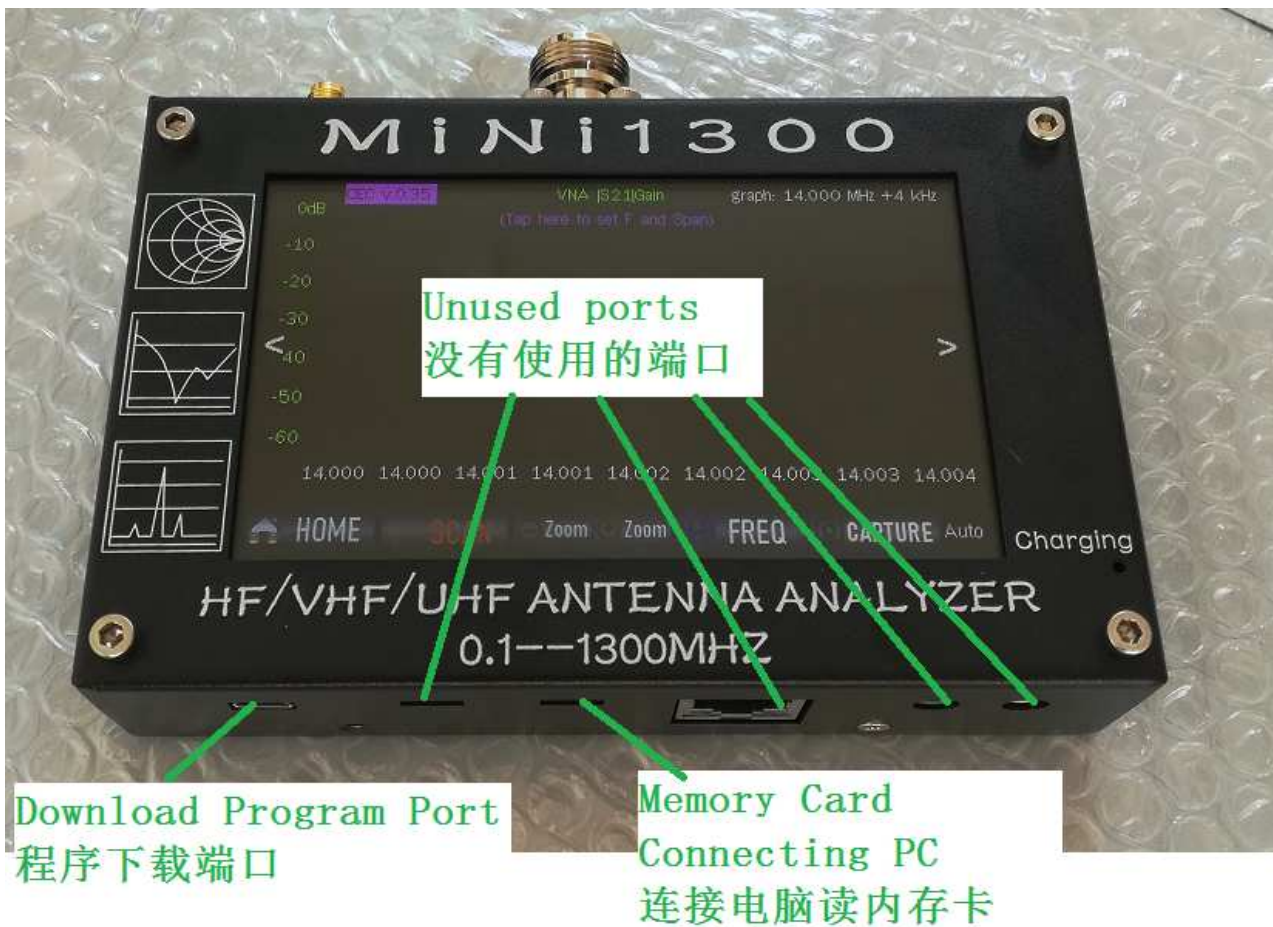External Storage Method: TF card

Dimensions: 133·85·29mm Does not contain prominent ports.   Weight: 550g

Warning: if the product thas parameter changes, the actual test will prevail.
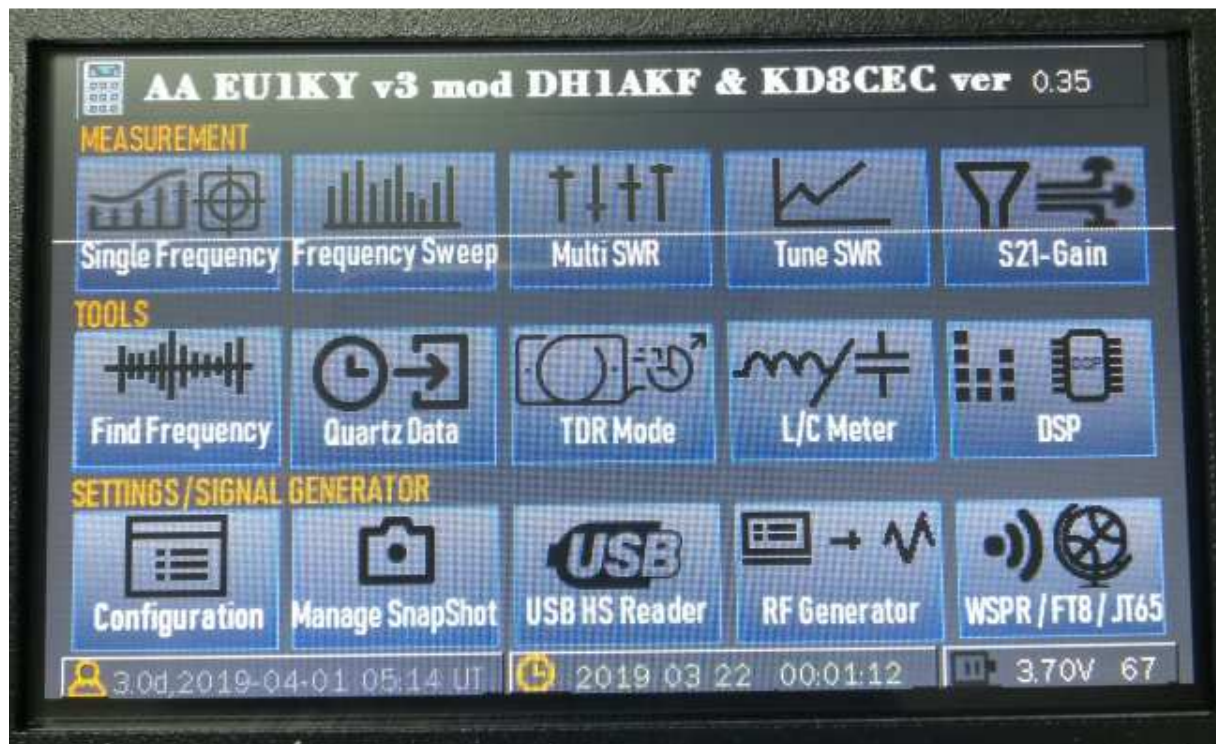
Package Included:
1x2019 New 0.1-1300mhz HF/VHF/UHF Antenna Analyzer Capacitive Touch Screen

Port specification:

VNA

TF 内存卡

Test port
天线端口

USB充电
USB-Charge 5V2A

Power switch
Press 3 seconds long.
电源开关，长按3秒

Unused ports
没有使用的端口

Download Program Port
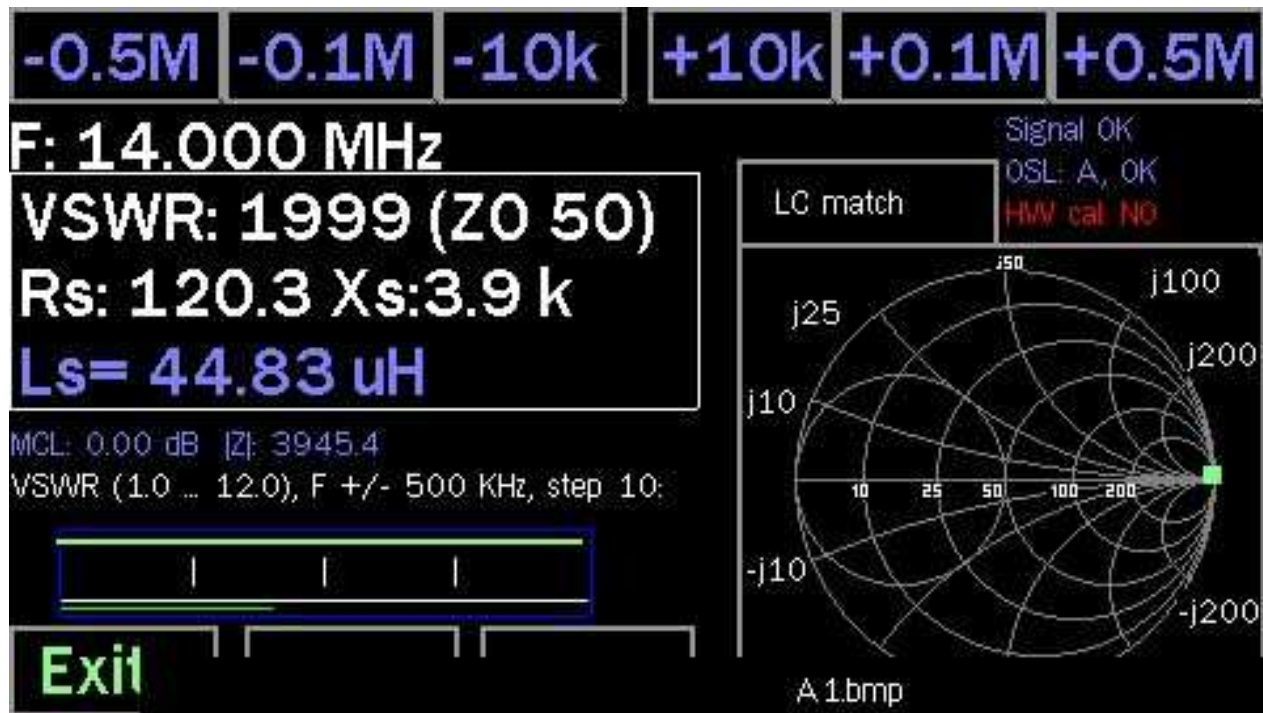程序下载端口

Memory Card
Connecting PC
连接电脑读内存卡

Main menu:

1. single Frequency
2. Frequency sweep
3. multi swr
4. tune swr
5. S21 gain
6. find Frequency
7. quartz data
8. TDR mode
9. L/C meter
10. DSP
11. configuration
12. manage snapshot
13. USB HS Reader
14. RF generator
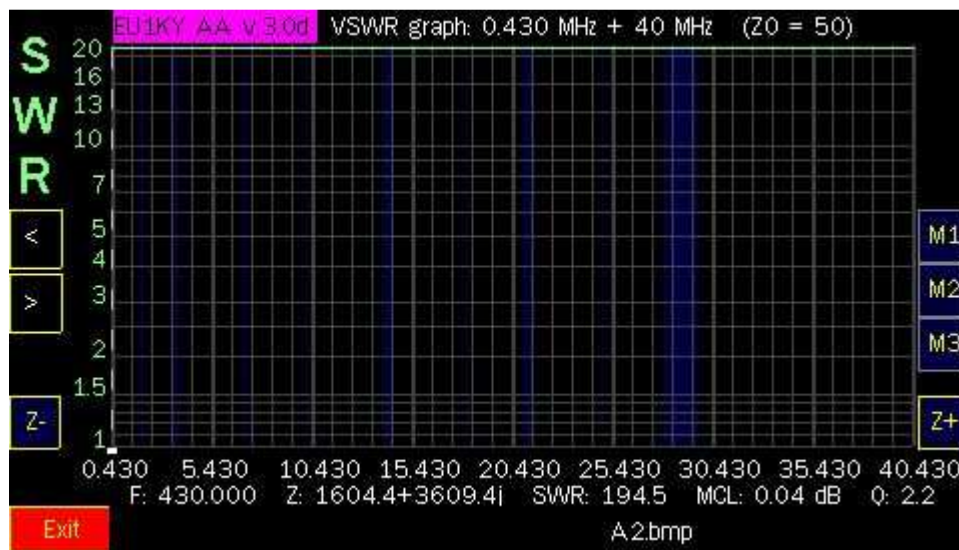15. WSPR/FT8/JT65

1. Single Frequency:

The buttons on top of the screen, the frequency can be changed step wise.

Set Frequency leads to the frequency selection window as in Panoramic scan.

The outline dare a with the SWR display also includes the values of equivalent series connection of the measured impedance. Touching this areas witches to the equivalent parallel circuit.

Tapping the Smithchart shows the dimensioning of the 2 possible LC matching networks in order to transform the measured impedance to 500.
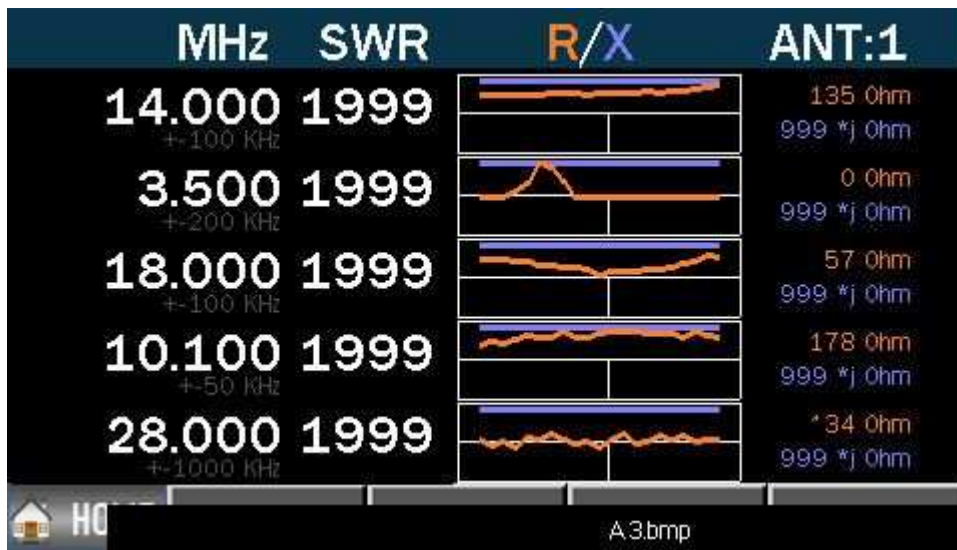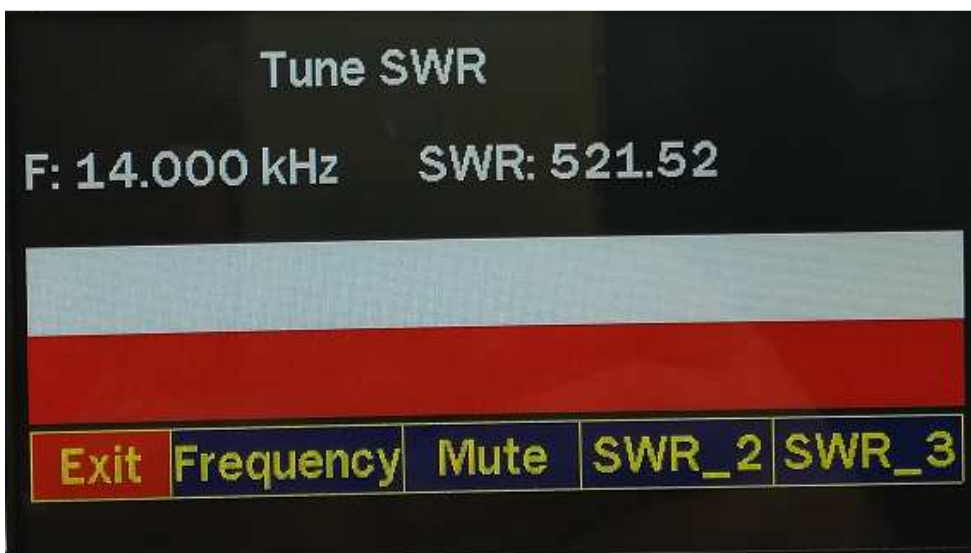
2. Frequency sweep:

Frequency Sweep:

Tapping the top edge of the screen opens the frequency input window. Optionally
an amateur band can be selected or the center frequency and bandwidth can be freely selected:

3. Multi SWR:

Changing or adding positions: tapping the frequency respectively of an empty field.
Delete a location: Touch-frequency field and in the frequency menu Cancel choose.
The selected frequencies are stored.

4. Tune SWR:

SWR measurement changes color and length of a strip. If the target SWR selected with SWR_2 or SWR_3 is exceeded the beams white and green. If the selected target SWR is exceeded, the bar is white and red. The frequency of sound varies with the SWR: the smaller the SWR, the deeper the sound. Tone switches the tone. Mute turns it off.
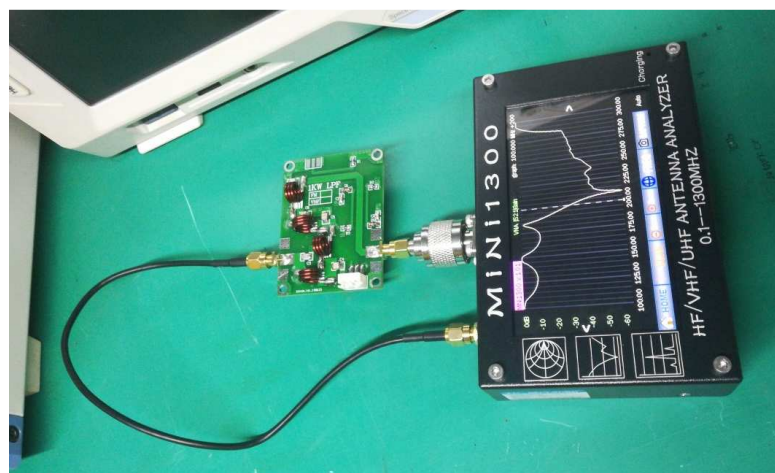
5. S21 gain:
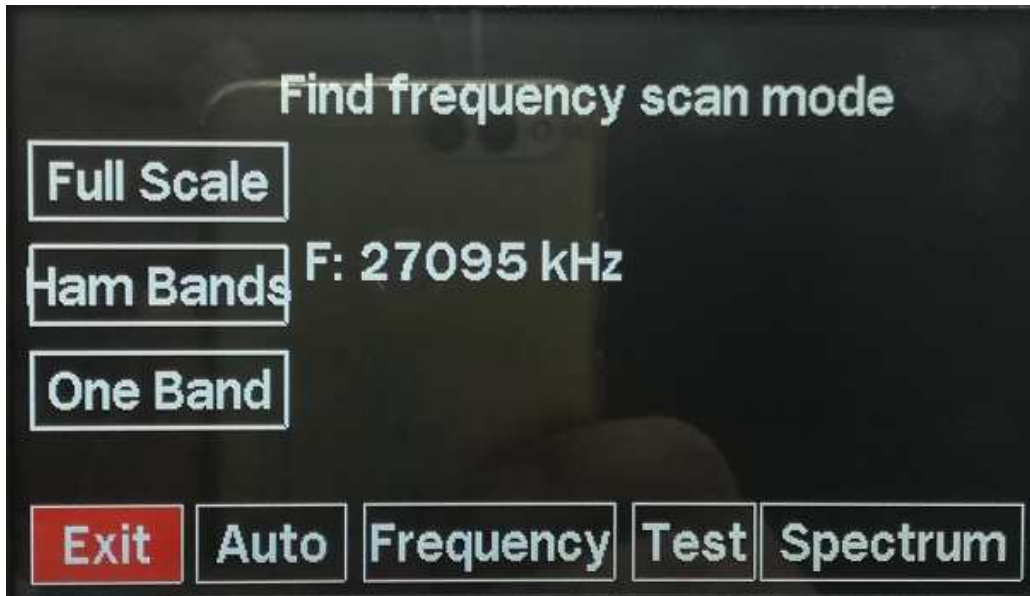
1. Feeder connection VNA and ANT ports

2. Open the Calibration Menu （S21)Gain Calibration for VNA
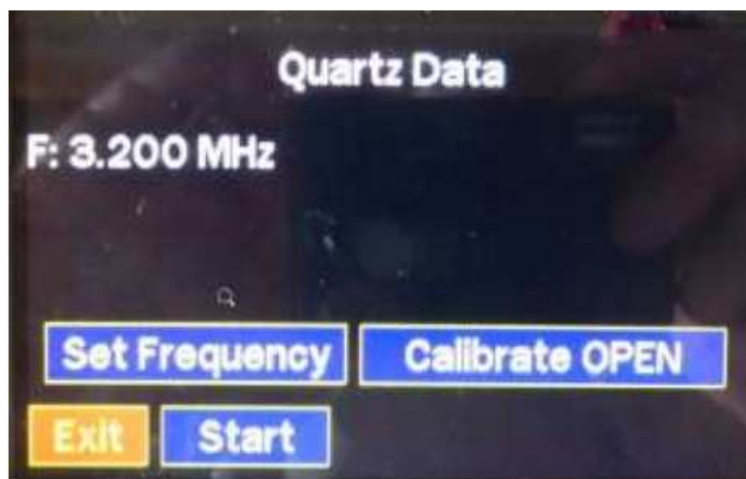

3. Filter test

6. Find Frequency:

Automatical: Continuous scan on/off
Frequency : Choice of frequency and scanning
Test : 3.5 MHz generator on/off
Spectrum : Spectrum display on/off.

7. Quartz Data:

After entering the frequency, Calibrate OPEN measures the parasitic impedance of the port.
After that, the user is prompted to put the quartz in the socket and start the measurement to.

8. TDR mode:

Cable Length:

To determine the electrical length of cables or to locate cable faults. The cursor is automatically at the point of maximum discontinuity. The velocity factor can with CHF. Vfbe changed. Store volatile stores it only for current measurements, Store permanently however.

9. L/C Meter:

Calibration before use: short , 50 ohms, open.

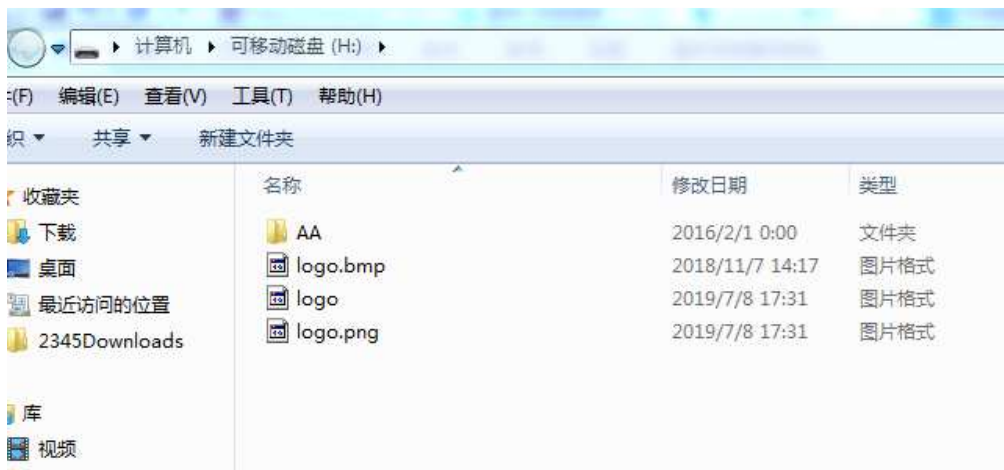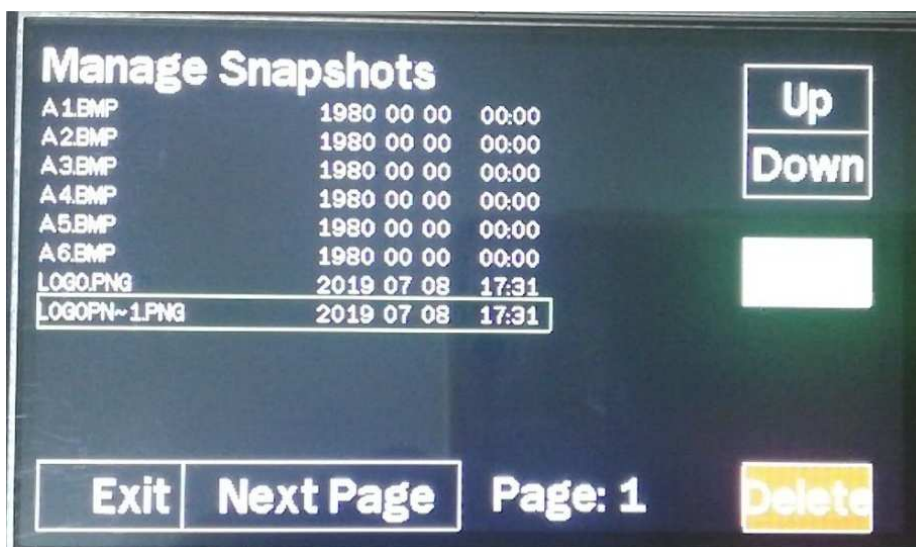# 10. DSP Noise and Level at Input of Measuring Board:

11. Configuration:

11.1 Color settings
11.2 System settings
11.3 Calibration menu

    A: ANT antenna test port calibration, respectively access 5.1R, 50R, 300R, three false loads
    B: Calibration of Internal Inspection Board (No Use)
    C: VNA calibration, feeder short circuit ANT and VNA port calibration
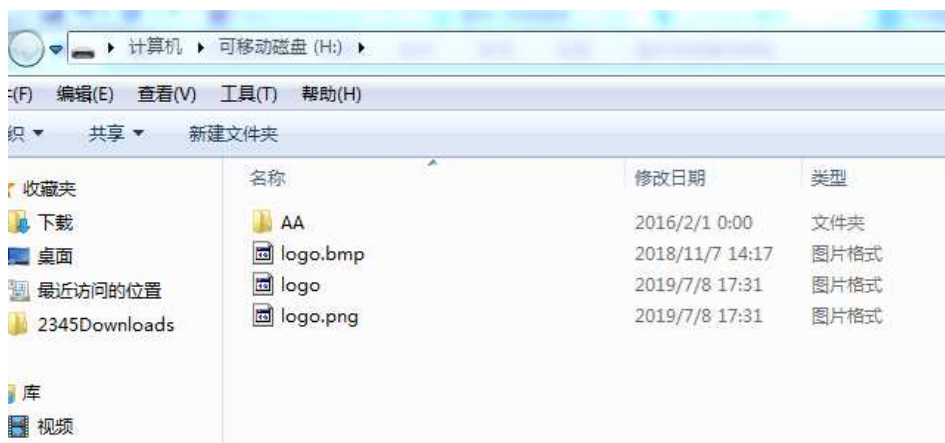   D: Maximum oscillation test

11.4 DSP Noise and level of input of DSP measuring board
11.5 Battery Voltage Calibration. Have been calibrated, please do not change the parameters.
11.6 Clock setting. Set year, month, day, time
11.7 Photo management snapshot.You can kept in view photos SD memory.
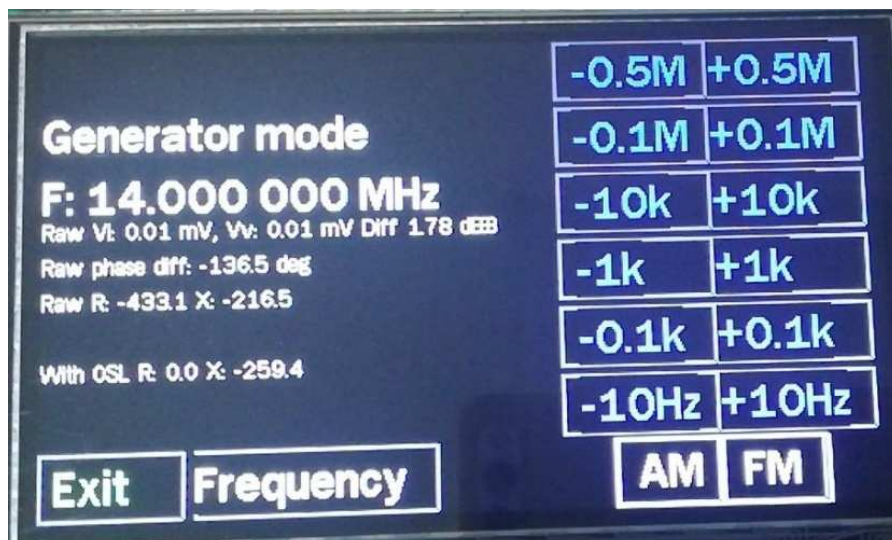11.8 USB memory. Connect to the computer to view the memory.

12. Manage Snapshot: You can view photos kept in SD memory

13. USB HS Reader:

14. RF generator: Generator AM/FM

AM modulates the carrier at 500 Hz

FM causes a frequency shift of ± 150 Hz with 500Hz

15. WSPR/FT8/JT65: